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CLAIMS

What is claimed is:

1. A hard disk drive comprising:

a housing having a base plate and a cover plate;

a spindle motor installed on the base plate;

a disk installed on the spindle motor to store data;

an actuator having a magnetic head to record and/or reproduce data on the disk, that is installed on the base plate, and is pivoted by a voice coil motor;

a hole cover made of a metal plate exhibiting an electric conductivity; and

a printed circuit board installed on a bottom surface of the base plate,

wherein a through hole where servo track information is recorded on a recording surface of the disk is positioned in the base plate, and the hole cover covers the through hole, and is attached to a bottom surface of the base plate to block an electromagnetic wave generated by the printed circuit board from being transferred to an inside of the housing.

2. The hard disk drive as claimed in claim 1, wherein:

eddy current is generated in the hole cover by the electromagnetic wave, and the electromagnetic wave is reduced by energy loss due to the eddy current.

3. The hard disk drive as claimed in claim 1, wherein:

the hole cover is made of an aluminum plate.

4. The hard disk drive as claimed in claim 1, wherein:

the hole cover is attached to the bottom surface of the base plate using an adhesive.

5. The hard disk drive as claimed in claim 1, wherein:

the hole cover is attached to the bottom surface of the base plate using an adhesive tape covering the hole cover.

6. A hard disk drive, comprising:

a base with an opening;

a disk, rotatably installed on the base;

an actuator to write to and read from the disk;

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a printed circuit board; and

a hole cover to cover the opening and one of attenuate and block an electromagnetic wave generated by the printed circuit board.

- 7. The hard disk drive according to claim 6, wherein the hole cover comprises: a metal plate.
- 8. The hard disk drive according to claim 7, wherein: the metal plate is aluminum.
- 9. The hard disk drive according to claim 6, wherein: the hole cover is electrically conductive.
- 10. The hard disk drive according to claim 6, wherein: the hole cover exhibits an electrical conductivity of predetermined magnitude; the hole cover exhibits an electrical resistance of predetermined magnitude; the hole cover has a thickness of predetermined magnitude; and the hole cover attenuates the electromagnetic wave by eddy current loss.
- 11. The hard disk drive according to claim 6, wherein: the hole cover exhibits an electrical conductivity of predetermined magnitude; the hole cover exhibits an electrical resistance of predetermined magnitude; the hole cover has a thickness of predetermined magnitude; and the hole cover blocks the electromagnetic wave by eddy current loss.
- 12. A base for a hard disk drive including a printed circuit board, the base comprising:

a base plate; and

a hole cover, covering an opening in the base plate, and attenuating an electromagnetic wave generated by the printed circuit board.

13. The base plate according to claim 12, wherein: the hole cover is an aluminum plate.

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14. A hole cover covering an opening in a base of a hard disk drive including a printed circuit board that generates an electromagnetic wave, the hole cover comprising: a metal plate attenuating the electromagnetic wave due to eddy current loss.

15. The hole cover according to claim 14, wherein: the metal plate is aluminum.